The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	10/6/6,942/	
Source:	IFWI	6
Date Processed by STIC:		04

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IFW16

RAW SEQUENCE LISTING

DATE: 11/02/2004 TIME: 12:49:35

PATENT APPLICATION: US/10/616,942A

Input Set : A:\01997.017300.2 SEQUENCE LISTING.txt
Output Set: N:\CRF4\11022004\J616942A.raw

```
3 <110> APPLICANT: Kato, Seishi
         Sekine, Shingo
 6 <120> TITLE OF INVENTION: HUMAN PROTEINS HAVING TRANSMEMBRANE DOMAINS AND
         CDNAS ENCODING THESE PROTEINS
 9 <130> FILE REFERENCE: 1997.17300.2
11 <140> CURRENT APPLICATION NUMBER: 10/616,942A
12 <141> CURRENT FILING DATE: 2003-07-11
14 <150> PRIOR APPLICATION NUMBER: 09/529,100
15 <151> PRIOR FILING DATE: 2000-08-21
17 <150> PRIOR APPLICATION NUMBER: JP 0276269
18 <151> PRIOR FILING DATE: 1997-10-08
20 <150> PRIOR APPLICATION NUMBER: PCT/JP98/04474
21 <151> PRIOR FILING DATE: 1998-10-05
23 <160> NUMBER OF SEQ ID NOS: 30
25 <170> SOFTWARE: PatentIn Ver. 2.0
27 <210> SEQ ID NO: 1
28 <211> LENGTH: 168
29 <212> TYPE: PRT
30 <213> ORGANISM: Homo sapiens
32 <400> SEQUENCE: 1
33 Met Ala Phe Asn Asp Cys Phe Ser Leu Asn Tyr Pro Gly Asn Pro Cys
                                        10
36 Pro Gly Asp Leu Ile Glu Val Phe Arg Pro Gly Tyr Gln His Trp Ala
                20
39 Leu Tyr Leu Gly Asp Gly Tyr Val Ile Asn Ile Ala Pro Val Asp Gly
40
                                40
42 Ile Pro Ala Ser Phe Thr Ser Ala Lys Ser Val Phe Ser Ser Lys Ala
                            55
45 Leu Val Lys Met Gln Leu Leu Lys Asp Val Val Gly Asn Asp Thr Tyr
                        70
48 Arg Ile Asn Asn Lys Tyr Asp Glu Thr Tyr Pro Pro Leu Pro Val Glu
                                        90
51 Glu Ile Ile Lys Arg Ser Glu Phe Val Ile Gly Gln Glu Val Ala Tyr
               100
                                   105
54 Asn Leu Leu Val Asn Asn Cys Glu His Phe Val Thr Leu Leu Arg Tyr
                               120
57 Gly Glu Gly Val Ser Glu Gln Ala Asn Arg Ala Ile Ser Thr Val Glu
       130
                           135
                                               140
60 Phe Val Thr Ala Ala Val Gly Val Phe Ser Phe Leu Gly Leu Phe Pro
                       150
63 Lys Gly Gln Arg Ala Lys Tyr Tyr
67 <210> SEQ ID NO: 2
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PATENT APPLICATION: US/10/616,942A

DATE: 11/02/2004 TIME: 12:49:35

Input Set : A:\01997.017300.2 SEQUENCE LISTING.txt
Output Set: N:\CRF4\11022004\J616942A.raw

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68 <211> LENGTH: 164
 69 <212> TYPE: PRT
 70 <213> ORGANISM: Homo sapiens
 72 <400> SEQUENCE: 2
73 Met Ala Ser Pro His Gln Glu Pro Lys Pro Gly Asp Leu Ile Glu Ile
76 Phe Arg Leu Gly Tyr Glu His Trp Ala Leu Tyr Ile Gly Asp Gly Tyr
                                     25
79 Val Ile His Leu Ala Pro Pro Ser Glu Tyr Pro Gly Ala Gly Ser Ser
           35
                                40
82 Ser Val Phe Ser Val Leu Ser Asn Ser Ala Glu Val Lys Arg Glu Arg
                             55
85 Leu Glu Asp Val Val Gly Gly Cys Cys Tyr Arg Val Asn Asn Ser Leu
                                             75
88 Asp His Glu Tyr Gln Pro Arg Pro Val Glu Val Ile Ile Ser Ser Ala
                    85
                                        90
91 Lys Glu Met Val Gly Gln Lys Met Lys Tyr Ser Ile Val Ser Arg Asn
               100
                                   105
94 Cys Glu His Phe Val Thr Gln Leu Arg Tyr Gly Lys Ser Arg Cys Lys
    115
                               120
97 Gln Val Glu Lys Ala Lys Val Glu Val Gly Val Ala Thr Ala Leu Gly
                           135
                                               140
100 Ile Leu Val Val Ala Gly Cys Ser Phe Ala Ile Arg Arg Tyr Gln Lys
101 145
                        150
103 Lys Ala Thr Ala
107 <210> SEQ ID NO: 3
108 <211> LENGTH: 141
109 <212> TYPE: PRT
110 <213> ORGANISM: Homo sapiens
112 <400> SEQUENCE: 3
113 Met Ala Pro Lys Val Phe Arg Gln Tyr Trp Asp Ile Pro Asp Gly Thr
114
116 Asp Cys His Arg Lys Ala Tyr Ser Thr Thr Ser Ile Ala Ser Val Ala
                                     25
119 Gly Leu Thr Ala Ala Ala Tyr Arg Val Thr Leu Asn Pro Pro Gly Thr
             35
122 Phe Leu Glu Gly Val Ala Lys Val Gly Gln Tyr Thr Phe Thr Ala Ala
                             55
125 Ala Val Gly Ala Val Phe Gly Leu Thr Thr Cys Ile Ser Ala His Val
                         70
                                             75
128 Arg Glu Lys Pro Asp Asp Pro Leu Asn Tyr Phe Leu Gly Gly Cys Ala
                     85
                                         90
131 Gly Gly Leu Thr Leu Gly Ala Arg Thr His Asn Tyr Gly Ile Gly Ala
                                    105
134 Ala Ala Cys Val Tyr Phe Gly Ile Ala Ala Ser Leu Val Lys Met Gly
           115
                                120
137 Arg Leu Glu Gly Trp Glu Val Phe Ala Lys Pro Lys Val
138 130
                            135
141 <210> SEQ ID NO: 4
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PATENT APPLICATION: US/10/616,942A

DATE: 11/02/2004 TIME: 12:49:35

Input Set: A:\01997.017300.2 SEQUENCE LISTING.txt
Output Set: N:\CRF4\11022004\J616942A.raw

```
142 <211> LENGTH: 142
 143 <212> TYPE: PRT
 144 <213> ORGANISM: Homo sapiens
 146 <400> SEQUENCE: 4
 147 Met Ala Ala Ala Val Ala Ala Gly Ala Gly Glu Pro Gln Ser Pro
150 Asp Glu Leu Leu Pro Lys Gly Asp Ala Glu Lys Pro Glu Glu Leu
                                     25
153 Glu Glu Asp Asp Glu Glu Leu Asp Glu Thr Leu Ser Glu Arg Leu
             35
                                 40
156 Trp Gly Leu Thr Glu Met Phe Pro Glu Arg Val Arg Ser Ala Ala Gly
        50
                             55
159 Ala Thr Phe Asp Leu Ser Leu Phe Val Ala Gln Lys Met Tyr Arg Phe
160 65
162 Ser Arg Ala Ala Leu Trp Ile Gly Thr Thr Ser Phe Met Ile Leu Val
                     85
                                         90
165 Leu Pro Val Val Phe Glu Thr Glu Lys Leu Gln Met Glu Gln Gln
166
                100
                                    105
168 Gln Leu Gln Gln Arg Gln Ile Leu Leu Gly Pro Asn Thr Gly Leu Ser
     115
                                120
171 Gly Gly Met Pro Gly Ala Leu Pro Ser Leu Pro Gly Lys Ile
172
       130
                            135
175 <210> SEQ ID NO: 5
176 <211> LENGTH: 346
177 <212> TYPE: PRT
178 <213> ORGANISM: Homo sapiens
180 <400> SEQUENCE: 5
181 Met Asp Pro Ala Arg Lys Ala Gly Ala Gln Ala Met Ile Trp Thr Ala
    1
184 Gly Trp Leu Leu Leu Leu Leu Arg Gly Gly Ala Gln Ala Leu Glu
185
                 20
187 Cys Tyr Ser Cys Val Gln Lys Ala Asp Asp Gly Cys Ser Pro Asn Lys
            3.5
190 Met Lys Thr Val Lys Cys Ala Pro Gly Val Asp Val Cys Thr Glu Ala
                             55
193 Val Gly Ala Val Glu Thr Ile His Gly Gln Phe Ser Leu Ala Val Arg
194 65
                                             75
196 Gly Cys Gly Ser Gly Leu Pro Gly Lys Asn Asp Arg Gly Leu Asp Leu
                     8.5
199 His Gly Leu Leu Ala Phe Ile Gln Leu Gln Gln Cys Ala Gln Asp Arg
                                   105
202 Cys Asn Ala Lys Leu Asn Leu Thr Ser Arg Ala Leu Asp Pro Ala Gly
           115
                                120
205 Asn Glu Ser Ala Tyr Pro Pro Asn Gly Val Glu Cys Tyr Ser Cys Val
       130
                           135
208 Gly Leu Ser Arg Glu Ala Cys Gln Gly Thr Ser Pro Pro Val Val Ser
                       150
                                            155
211 Cys Tyr Asn Ala Ser Asp His Val Tyr Lys Gly Cys Phe Asp Gly Asn
                   165
                                        170
                                                            175
```

PATENT APPLICATION: US/10/616,942A

DATE: 11/02/2004 TIME: 12:49:35

Input Set: A:\01997.017300.2 SEQUENCE LISTING.txt
Output Set: N:\CRF4\11022004\J616942A.raw

```
214 Val Thr Leu Thr Ala Ala Asn Val Thr Val Ser Leu Pro Val Arg Gly
 215
                 180
                                     185
 217 Cys Val Gln Asp Glu Phe Cys Thr Arg Asp Gly Val Thr Gly Pro Gly
 218
             195
                                 200
 220 Phe Thr Leu Ser Gly Ser Cys Cys Gln Gly Ser Arg Cys Asn Ser Asp
                             215
                                                  220
 223 Leu Arg Asn Lys Thr Tyr Phe Ser Pro Arg Ile Pro Pro Leu Val Arg
                         230
                                             235
 226 Leu Pro Pro Pro Glu Pro Thr Thr Val Ala Ser Thr Thr Ser Val Thr
                     245
                                         250
229 Thr Ser Thr Ser Ala Pro Val Arg Pro Thr Ser Thr Thr Lys Pro Met
                 260
                                     265
232 Pro Ala Pro Thr Ser Gln Thr Pro Arg Gln Gly Val Glu His Glu Ala
             275
                                 280
235 Ser Arg Asp Glu Glu Pro Arg Leu Thr Gly Gly Ala Ala Gly His Gln
        290
                             295
238 Asp Arg Ser Asn Ser Gly Gln Tyr Pro Ala Lys Gly Gly Pro Gln Gln
                         310
                                             315
241 Pro His Asn Lys Gly Cys Val Ala Pro Thr Ala Gly Leu Ala Ala Leu
                     325
244 Leu Leu Ala Val Ala Ala Gly Val Leu Leu
245
                340
248 <210> SEQ ID NO: 6
249 <211> LENGTH: 66
250 <212> TYPE: PRT
251 <213> ORGANISM: Homo sapiens
253 <400> SEQUENCE: 6
254 Met Val Ala Lys Gln Arg Ile Arg Met Ala Asn Glu Lys His Ser Lys
                                          10
257 Asn Ile Thr Gln Arg Gly Asn Val Ala Lys Thr Ser Arg Asn Ala Pro
                 20
                                      25
260 Glu Glu Lys Ala Ser Val Gly Pro Trp Leu Leu Ala Leu Phe Ile Phe
             35
                                  40
263 Val Val Cys Gly Ser Ala Ile Phe Gln Ile Ile Gln Ser Ile Arg Met
264
         50
                             55
266 Gly Met
267 65
270 <210> SEQ ID NO: 7
271 <211> LENGTH: 504
272 <212> TYPE: DNA
273 <213> ORGANISM: Homo sapiens
275 <400> SEQUENCE: 7
276 atggcgttta atgattgctt cagtttgaac taccctggca acccctgccc aggggacttg 60
278 atcgaagtgt tccgtcctgg ctatcagcac tgggccctgt acttgggtga tggttacgtt 120
280 atcaacatag cacctgtaga tggcattcct gcgtccttta caagcgccaa gtctgtattc 180
282 agcagtaagg ccctggtgaa aatgcagctc ttgaaggatg ttgtgggaaa tgacacatac 240
284 agaataaaca ataaatacga tgaaacgtac ccccctctcc ctgtggaaga aatcataaag 300
286 cggtcagagt ttgtaattgg acaggaggtg gcctataact tacttgtcaa caactgtgaa 360
288 cattttgtga cattgcttcg ctatggagaa ggagtttcag agcaggccaa ccgagcgata 420
```

PATENT APPLICATION: US/10/616,942A

DATE: 11/02/2004 TIME: 12:49:35

Input Set : A:\01997.017300.2 SEQUENCE LISTING.txt
Output Set: N:\CRF4\11022004\J616942A.raw

```
290 agtaccgttg agtttgtgac agctgctgtt ggtgtcttct cattcctggg cttgtttcca 480
 292 aaaggacaaa gagcaaaata ctat
 295 <210> SEQ ID NO: 8
 296 <211> LENGTH: 492
 297 <212> TYPE: DNA
 298 <213> ORGANISM: Homo sapiens
 300 <400> SEQUENCE: 8
 301 atggcttcgc cacaccaaga gcccaaacct ggagacctga ttgagatttt ccgccttggc 60
 303 tatgagcact gggccctgta tataggagat ggctacgtga tccatctggc tcctccaagt 120
 305 gagtaccccg gggctggctc ctccagtgtc ttctcagtcc tgagcaacag tgcagaggtg 180
 307 aaacgggagc gcctggaaga tgtggtggga ggctgttgct atcgggtcaa caacagcttg 240
 309 gaccatgagt accaaccacg gcccgtggag gtgatcatca gttctgcgaa ggagatggtt 300
311 ggtcagaaga tgaagtacag tattgtgagc aggaactgtg agcactttgt cacccagctg 360
313 agatatggca agtcccgctg taaacaggtg gaaaaggcca aggttgaagt cggtgtggcc 420
315 acggcgcttg gaatcctggt tgttgctgga tgctcttttg cgattaggag ataccaaaaa 480
317 aaagcgacag cc
                                                                       492
320 <210> SEQ ID NO: 9
321 <211> LENGTH: 423
322 <212> TYPE: DNA
323 <213> ORGANISM: Homo sapiens
325 <400> SEQUENCE: 9
326 atggcgccga aggtttttcg tcagtactgg gatatccccg atggcaccga ttgccaccgc 60
328 aaageetaca geaceaceag tattgeeage gtegetggee tgacegeege tgeetacaga 120
330 gtcacactca atcctccggg caccttcctt gaaggagtgg ctaaggttgg acaatacacg 180
332 ttcactgcag ctgctgtcgg ggccgtgttt ggcctcacca cctgcatcag cgcccatgtc 240
334 cgcgagaagc ccgacgaccc cctgaactac ttcctcggtg gctgcgccgg aggcctgact 300
336 ctgggagcac gcacgcacaa ctacgggatt ggcgccgccg cctgcgtgta ctttggcata 360
338 gcggcctccc tggtcaagat gggccggctg gagggctggg aggtgtttgc aaaacccaag 420
340 gtg
343 <210> SEO ID NO: 10
344 <211> LENGTH: 426
345 <212> TYPE: DNA
346 <213> ORGANISM: Homo sapiens
348 <400> SEQUENCE: 10
349 atggctgccg ccgtcgctgc tgccggtgca ggggaacccc agtccccgga cgaattgctc 60
351 ccgaaaggcg acgcggagaa gcctgaggag gagctggagg aggacgacga tgaggagcta 120
353 gatgagaccc tgtcggagag actatggggc ctgacggaga tgtttccgga gagggtccgg 180
355 teegeggeeg gageeaettt tgatetttee etetttgtgg eteagaaaat gtacaggttt 240
357 tecagggeag cettgtggat tgggaceaet teetttatga teetggttet teeegttgte 300
359 tttgagacgg agaagttgca aatggagcaa cagcagcaac tgcagcagcg gcagatactt 360
361 ctaggaccta acacaggget ctcaggagga atgccagggg ctctaccctc acttcctgga 420
363 aagatc
                                                                       426
366 <210> SEQ ID NO: 11
367 <211> LENGTH: 1038
368 <212> TYPE: DNA
369 <213> ORGANISM: Homo sapiens
371 <400> SEQUENCE: 11
372 atggaccccg ccaggaaagc aggtgcccag gccatgatct ggactgcagg ctggctgctg 60
374 ctgctgctgc ttcgcggagg agcgcaggcc ctggagtgct acagctgcgt gcagaaagca 120
```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/616,942A

DATE: 11/02/2004 TIME: 12:49:36

Input Set : A:\01997.017300.2 SEQUENCE LISTING.txt

Output Set: N:\CRF4\11022004\J616942A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:30; Xaa Pos. 150

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/616,942A

DATE: 11/02/2004 TIME: 12:49:36

Input Set : A:\01997.017300.2 SEQUENCE LISTING.txt
Output Set: N:\CRF4\11022004\J616942A.raw

L:1236 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:30 L:1268 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:144